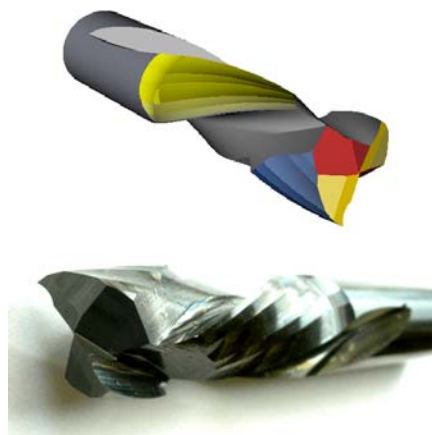



















## UpDown Endmill Ø16 Z2+2

A16-010

The UpDown Endmill can be manufactured from solid or resharpened. They are fully integrated in the Quinto Software as a specific tool type with their own Editor. Alternately the O.D. relief can be ground peripherally, using a 1V1 wheel.



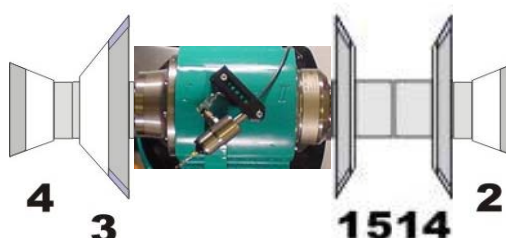
### 1. Cycletime for Production

Tool specifications Diameter 16 mm, Z 2, Length of cutting edge 42 mm, Helix angle 30° Material CARBIDE									
Operations									
Probe									
Feed [mm/Min]	2000	65	45	100	100	200	120	200	100
Power [kW]		4	2	2	1	1	1	1	1
Cutting feed [m/s]		18	16	32	24	24	24	24	24
Used wheels									
Grinding time [s]	16	98	170	29	192	29	58	49	272
Total cycle time	15 Min 11								

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

### 2. Used Grinding Wheels

15 Ø100 1V1 D64 V70°  
14 Ø100 1V1 D64 V70°  
3 Ø125 12V9 D64  
4 Ø75 11V9 D76  
2 Ø75 11V9 D76



### 3. Machine and Software Requirements

Machines: 5 axes CNC grinders : CORVUS GDS, GEMINI DMR, NORMA CFG  
Control: Fanuc 160i  
Coolant: Synthetic Oil, pressure 6 - 7 bar  
Software: Quinto 4.3, DXQ

responsible engineer: OP,28.1.08

[www.schneeberger.ch](http://www.schneeberger.ch)

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